

# Why LEED™: The Colorado Experience

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# Rebuild Colorado's mission

**Better buildings**  
through energy and  
water efficiency  
improvements

*Free services for state  
and local governments*



# Free services and expertise

- Energy Performance Contracting
  - High Performance Design
  - Commissioning
- ...and more!



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# Why high performance design? ...Reports from the field

*The efficiency of some schools  
built in the late 1990's was  
disappointing.*

***Why?***

***What went wrong?***

*Hmmm....*

*We need different  
results*

*We need a new  
process!*



# To get different results, we need to do things differently....

- Use integrated design, not “architect down”
- Use energy modeling from the beginning
- Use commissioning
- Use life-cycle rather than first cost for decisions
- Set energy & water performance targets
- Model exemplary projects
- Focus on occupant comfort & productivity
- Focus on flexibility and durability

# Poudre School District

**Zach Elementary**

**Bacon Elementary**





# Poudre School District

## Fossil Ridge High School





# Results...

- ✓ Great learning environments
- ✓ Pay about 2% more in design fees
- ✓ Typical construction budget
- ✓ Utility bills half that of some new schools in Colorado

# More High Performance Design Leaders in Colorado

- **Adams 12 Five Star Schools**  
Elementary 30
- **American Century**
- **City of Fort Collins**  
Harmony Library
- **Colorado School of Mines**  
Center for Tech. and Learning Media
- **Northwest Colorado Water  
Conservancy District**
- **Summit School District**  
Silverthorne Elementary
- **University of Colorado**  
UMC Addition



**...and others**



*University of Colorado  
University Memorial Center*



# 2% Average Cost Premium to Achieve LEED

- Executive order required “cost-effective” sustainable design for CA state agencies
  - Oct 2003 report for 40 state agencies
  - 33 LEED buildings in the US
- Findings:
  - average of 2% cost premium to achieve LEED
  - 10 to 1 benefit to cost ratio
  - cost-effective way to address state challenges

# Encouraging high performance design

US Green Building Council's  
LEED™ rating system

- Recognized standard
- Provides a framework for good design
- Encourages inclusion of cost-effective energy efficient and environmentally sound features

# Rebuild Colorado High Performance Design Grants

- New in 2003
- Grants for Demonstration Projects in High Performance Design using LEED™
- \$200,000 available

# Rebuild Colorado High Performance Design Grants

Grant can be used to pay for  
Integrated design services

- facilitating integrated design meetings
- introducing team to LEED scorecard
- setting performance targets
- and more

# Rebuild Colorado High Performance Design Grants

- Eight \$20,000 grants awarded to date
  - More requests in the queue
  - Stay tuned...
- more grants may be available July 2004





# High Performance Design Grant 2003-2004 Recipients

## State

- Colorado Department of Labor and Employment

## Local govt/non-profit

- Children's Museum of Durango *in collaboration with the City of Durango*
- Town of Snowmass

## K-12 Schools

- Academy of Charter Schools
- Cheyenne Mountain School District
- Ouray County School District
- Peyton School District
- Weld County RE-5J School District
- West End School District



# More projects underway...

## Colorado LEED Registered Projects

- Aspen Skiing Company
- City of Fort Collins
- CH2M Hill
- Children's Hospital
- Children's Museum of Durango with the City of Durango
- Colorado College
- Colorado Department of Labor & Employment
- Colorado Mountain College
- Colorado State University
- Continuum
- Denver Place with Amerimar Realty Company of Colo for EPA
- Mile High Properties
- National Renewable Energy Laboratory
- Pikes Peak Regional Development Center
- Pioneer School for Expeditionary Learning
- Poudre School District
- U.S. Department of Transportation
- U.S. General Services Administration
- University of Denver
- Vail Christian High School



*More info: [www.usgbc.org/leed](http://www.usgbc.org/leed)*

**[www.colorado.gov/rebuildco](http://www.colorado.gov/rebuildco)**



# LEED Certified Buildings in Colorado

- **Aspen Skiing Company: Sundeck Restaurant**
- **City of Boulder: North Boulder Recreation Center**
- **CH2M Hill: South Building**
- **Boulder Community Foothills Hospital**
- **CH2M Hill: West Building**

# Why LEED: The Colorado Experience

## Panel:

- *Bill Boyes, City of Boulder*  
North Boulder Recreation Center (LEED Silver)
- *Ed Holder, Poudre School District*  
Zach and Bacon Elementary (sustainable design) and Fossil Ridge HS (LEED registered)
- *Kai Abelkis, Boulder Community Hospital*  
Foothills Campus (LEED Silver)
- *Dave Witte, DTC/Meridian*  
CH2M Hill Offices (LEED Certified)